

WHAT IS CLAIMED IS:

1. A speaker system operable to generate sound, comprising:
 - a) a speaker operable to generate sound in response to an audio signal; and
 - b) a communication module operable to transmit information to an amplifier in response to a carrier signal, wherein the information includes speaker characteristics.
2. The speaker system of claim 1, wherein the communication module transmits information to the amplifier across wires.
3. The speaker system of claim 1, wherein the communication module transmits information to the amplifier using a wireless connection.
4. The speaker system of claim 1, wherein the speaker system further comprises a high-pass filter and rectifier operable to derive output power from the carrier signal.
5. The speaker system of claim 1, wherein the communication module has high impedance to avoid placing a load on the speaker that would degrade system performance.
6. The speaker system of claim 1, wherein the communication module communicates via one of the group comprising: amplitude modulation, phase-shift keying, and two-tone modulation.
7. The speaker system of claim 1, wherein the information transmitted by the communication module is transmitted in a separate frequency band from the audio signal.
8. The speaker system of claim 1, wherein the information transmitted by the communication module is transmitted in a frequency band that overlaps the audio signal.
9. A method for operating a speaker system in a sound system, the method comprising:
 - a) generating a carrier signal from an amplifier to the speaker system through a connection between the amplifier and the speaker system;
 - b) rectifying power from the carrier signal in a speaker system, wherein the power is used by a communication module; and
 - c) transmitting information to the amplifier using the communication module for as long as the carrier signal is present at the speaker system.
10. The method of claim 9, the method further comprising presenting high impedance at an interface between the communication module and the speaker system connection and at all frequencies with a normal audio range of the speaker.
11. The method of claim 9, the method further comprising transmitting information from the amplifier to the speaker system.

12. The method of claim 9, wherein the transmitting information to the amplifier is accomplished using one of the group comprising: amplitude modulation; phase-shift keying; and two-tone modulation.

13. The method of claim 9, wherein the information is transmitted in a frequency band separate from a frequency band used by an audio signal.

14. The method of claim 9, wherein the information is transmitted in a frequency band that overlaps a frequency band used by an audio signal.

15. A speaker system, comprising:

a) a speaker connector operable to connect the speaker system to an amplifier;

b) speaker hardware operable to generate sound from an audio signal received from the speaker connectors;

c) a high-pass filter operable to pass a high frequency carrier signal received from the speaker connector;

d) a rectifier operable to receive the high frequency carrier signal and convert it into a power signal; and

e) a communications module operable to receive the power signal from the rectifier and transmit characteristics of the speaker hardware to the amplifier using the speaker connector.

16. The speaker system of claim 15, wherein the speaker connector connects the speaker system to the amplifier with wires.

17. The speaker system of claim 15, wherein the speaker connector connects the speaker system to the amplifiers using a wireless connection.